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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,818	08/06/2001	Shoji Hizatate	330-238	7888

7590

04/16/2003

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EXAMINER

HESS, BRUCE H

ART UNIT

PAPER NUMBER

1774

6

DATE MAILED: 04/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,818

Applicant(s)

Hizate et al

Examiner

Bruce Hess

Group Art Unit

1774

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 2-24-03 (Election)
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-48 is/are pending in the application.
- Of the above claim(s) 18-27 and 45-48 is/are withdrawn from consideration.
- ☒ Claim(s) 4 is/are allowed.
- ☒ Claim(s) 1-3, 5-17 and 28-44 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☒ All ☐ Some* ☐ None of the:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____.

☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 3
- ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

1. The restriction/election requirement of Paper No. 4 is adhered to and made final for the reasons of record.
2. Claim 4 is allowed.
3. Claims 1-3, 5 and 6 are rejected under 35 USC 102(b) as being anticipated by any of Usami et al. (USP 4,644,376), Nakamura et al. (JP 01-141786) or Nakamura et al. (JP 02-145560).
4. Claims 1-3, 5, 6, 13-16, 38-40 and 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of the patents to Usami et al., Nakamura et al. '786 or Nakamura et al. '560.

These patents all teach heat-sensitive recording material which can employ N-(2-hydroxyphenyl)-p-toluene sulfonamide as a color developer (see column 7, lines 9 and 10). The Nakamura et al. patents additionally suggest N-(4-hydroxyphenyl)benzenesulfonamide as a color developer. Use of a mixture of sulfonamide color developers which perform the same function would have been obvious to one of ordinary skill in this art in the absence of unexpected. In re Crockett, 126 USPQ 186. USP of the position isomer [i.e., N-(4-hydroxyphenyl) -p-toluenesulfonamide] of Usami et al's N-(2-hydroxyphenyl)-p-toluenesulfonamide would have been obvious expedient to one of ordinary skill in this art. In re Mehta, 146 USPQ 284. Finally, the experimental modification of the prior art in order of ascertain optimum operating conditions (e.g., determine

the composition of the paper substrate) fails to render applicants claims patentable in the absence of unexpected results.

5. Claims 7-12, 17, 28-37 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of the patents to Usami et al. or Nakamura et al. in view of applicants' statement of the prior art.

The primary references apply as per the preceding paragraph. Applicants acknowledge in their specification that pigment/adhesive undercoatings, UV stabilizers, phosphoric esters and aromatic isocyanates are conventional materials employed in heat-sensitive recording material. Use of these conventional materials for their concomitant function in the heat-sensitive recording material of any of the primary references would have been obvious to one of ordinary skill in this art in the absence of unexpected results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce Hess whose telephone number is (703) 308-2402. The examiner can normally be reached on Monday to Friday 9 Am to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7115 for regular communications and (703) 308-7115 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to read "Bruce Hess". The signature is fluid and cursive, with the first name "Bruce" and the last name "Hess" clearly distinguishable.

B. Hess/mn
April 15, 2003

**BRUCE H. HESS
PRIMARY EXAMINER
GROUP 1300**